

PATENT NUMBER

U.S. UTILITY Patent Application

O.I.P.E.
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EXAMINER

APPLICANTS

(continued)

TITLE

Glycosaminoglycans and proteoglycans are the major components of the extracellular matrix of cartilage and bone. They are also found in the intervertebral discs, the menisci of the knee, and the articular surfaces of the joints. The glycosaminoglycans are a family of polysaccharides that are characterized by their high negative charge density and their ability to bind water. The proteoglycans are a family of glycoproteins that are characterized by their high molecular weight and their ability to form a network of fibers. The glycosaminoglycans and proteoglycans are synthesized by chondrocytes in the cartilage and by osteoblasts in the bone. They are then secreted into the extracellular matrix, where they form a network of fibers that provides structural support and mechanical strength to the tissue. The glycosaminoglycans and proteoglycans are also involved in a variety of biological processes, including cell signaling, cell adhesion, and tissue repair. In the context of the patent, the glycosaminoglycans and proteoglycans are used as a starting material for the synthesis of a novel class of polymers. These polymers are designed to mimic the structure and properties of the natural glycosaminoglycans and proteoglycans, and are used in a variety of applications, including tissue engineering, drug delivery, and biomaterials.

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ISSUING CLASSIFICATION

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	_____ (Legal Instruments Examiner) _____ (Date)		Amount Due	Date Paid	
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